

WHAT IS CLAIMED IS:

1. A method for deaerating liquid, especially water, ~~that~~ contains air, oxygen, nitrogen, or other gas dissolved therein, by

(a) providing a stream of said liquid flowing at a first velocity and at a first pressure in a line having a first cross-sectional area,

(b) flowing said stream into and through a pressure reduction region in said line having a second cross-sectional area less than said first cross-sectional area, whereupon in said region the velocity of said stream increases, the pressure of said stream decreases, and gas dissolved in said stream evolves from said stream, and

(c) recovering said evolved gas separately from said liquid before it redissolves into said liquid.

2. A method according to claim 1 further comprising injecting stripping gas into the stream upstream of said pressure reduction region, and removing said stripping gas from said stream downstream of said pressure reduction region.

3. A method according to claim 2 wherein said the stripping gas is air, nitrogen or carbon dioxide.

4. A method according to claim 1 wherein step (c) comprises feeding said stream into a separatory vessel wherein said evolved gas and said liquid separate from each other, and said evolved gas is vented out of said vessel.

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5. A method according to claim 1 wherein after said evolved gas is recovered from said liquid, said liquid is recycled to said line upstream of said region.

6. Apparatus useful for deaerating a liquid having gas dissolved therein, comprising
a conduit for carrying a stream of said liquid, the conduit having a first cross-sectional area and having a region having a second cross-sectional area less than said first cross-sectional area, and
a separatory vessel having an inlet in fluid communication with the outlet of said region.

7. Apparatus according to claim 6 further comprising means to inject gas into said conduit upstream of said region.

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